Amendments to the Claims:

The following listing of claims will replace all prior versions, and listings, of claims in the application:

1-5. (Canceled)

6. (Currently Amended) ~~The~~ An electrostatic capacitance detection device ~~according to claim 1,~~ for reading surface contours of an object by detecting an electrostatic capacitance, which changes according to a distance with the object, comprising:

M individual power supply lines and N individual output lines, arranged in a matrix of M rows × N columns, and electrostatic capacitance detection elements provided on crossing points of the individual power supply lines and the individual output lines,

each of the electrostatic capacitance detection elements being formed of a signal detection element and a signal amplification element,

the signal detection element being formed of a capacitance detecting electrode, a capacitance detecting dielectric layer and a reference capacitor,

the reference capacitor being formed of a reference capacitor first electrode, a reference capacitor dielectric layer and a reference capacitor second electrode, and

the signal amplification element being formed of a MIS type thin film semiconductor device for signal amplification, including a gate electrode, a gate insulating layer and a semiconductor layer,

using an area of the reference capacitor electrode of S_R (μm^2), a gate electrode area of the MIS type thin film semiconductor device for signal amplification of S_T (μm^2), a thickness of the reference capacitor dielectric layer of t_R (μm), a dielectric constant of the reference capacitor dielectric layer of ε_R, a thickness of the gate insulating layer of t_{ox} (μm), and a dielectric constant of the gate insulating layer of ε_{ox}, a capacitance C_R (reference capacitor capacitance) of the reference capacitor and a transistor capacitance C_T of the MIS type thin film semiconductor device for signal amplification are defined as

$C_R=\varepsilon_0 \cdot \varepsilon_R \cdot S_R/t_R$,

$C_T=\varepsilon_0 \cdot \varepsilon_{ox} \cdot S_T/t_{ox}$

where ε_0 is permittivity in vacuum, respectively; and

using an area of the capacitance detecting electrode of S_D (μm^2), a thickness of the capacitance detecting dielectric layer of t_D (μm), and a dielectric constant of

the capacitance detecting dielectric layer of ε_D, an element capacitance C_D of the signal detection element is defined as

$$C_D=\varepsilon_0\cdot\varepsilon_D\cdot S_D/t_D$$

where ε_0 is permittivity in vacuum, and

the element capacitance C_D being sufficiently larger than C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T.

7. (Canceled).

8. (Currently Amended) ~~The~~ An electrostatic capacitance detection device ~~according to claim 7,~~ for reading surface contours of an object by detecting an electrostatic capacitance, which changes according to a distance with the object, comprising:

M individual power supply lines and N individual output lines, arranged in a matrix of M rows × N columns, and electrostatic capacitance detection elements provided on crossing points of the individual power supply lines and the individual output lines; and

a drain region of the MIS type thin film semiconductor device for signal amplification being electrically coupled to the individual power supply lines and the reference capacitor first electrode, and a gate electrode of the MIS type thin film semiconductor device for signal amplification being coupled to the capacitance detecting electrode and the reference capacitor second electrode,

each of the electrostatic capacitance detection elements being formed of a signal detection element and a signal amplification element,

the signal detection element being formed of a capacitance detecting electrode, a capacitance detecting dielectric layer and a reference capacitor,

the reference capacitor being formed of a reference capacitor first electrode, a reference capacitor dielectric layer and a reference capacitor second electrode,

the signal amplification element being formed of a MIS type thin film semiconductor device for signal amplification, including a gate electrode, a gate insulating layer and a semiconductor layer,

the capacitance detecting dielectric layer being located on an uppermost surface of the electrostatic capacitance detection device,

the object being apart from the capacitance detecting dielectric layer with an object distance of t_A without contacting, a capacitance C_A of the object being defined as

$$C_A=\varepsilon_0\cdot\varepsilon_A\cdot S_D/t_A$$

using the permittivity in vacuum of ε_0, a dielectric constant of air of ε_A, and an area of the capacitance detecting electrode of S_D, and

C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T, being sufficiently larger than the capacitance C_A of the object.

9. (Currently Amended) ~~The~~ An electrostatic capacitance detection device ~~according to claim 1,~~ for reading surface contours of an object by detecting an electrostatic capacitance, which changes according to a distance with the object, comprising:

M individual power supply lines and N individual output lines, arranged in a matrix of M rows × N columns, and electrostatic capacitance detection elements provided on crossing points of the individual power supply lines and the individual output lines,

each of the electrostatic capacitance detection elements being formed of a signal detection element and a signal amplification element,

the signal detection element being formed of a capacitance detecting electrode, a capacitance detecting dielectric layer and a reference capacitor,

the reference capacitor being formed of a reference capacitor first electrode, a reference capacitor dielectric layer and a reference capacitor second electrode, and

the signal amplification element being formed of a MIS type thin film semiconductor device for signal amplification, including a gate electrode, a gate insulating layer and a semiconductor layer,

using an area of the reference capacitor electrode of S_R (μm^2), a gate electrode area of the MIS type thin film semiconductor device for signal amplification of S_T (μm^2), a thickness of the reference capacitor dielectric layer of t_R (μm), a dielectric constant of the reference capacitor dielectric layer of ε_R, a thickness of the gate insulating layer of t_{ox} (μm), and a dielectric constant of the gate insulating layer of ε_{ox}, a capacitance C_R of the reference capacitor and a transistor capacitance C_T of the MIS type thin film semiconductor device for signal amplification are defined as

$C_R=\varepsilon_0 \cdot \varepsilon_R \cdot S_R/t_R$,

$C_T=\varepsilon_0 \cdot \varepsilon_{ox} \cdot S_T/t_{ox}$

where ε_0 is the permittivity in vacuum, respectively; and

using an area of the capacitance detecting electrode of S_D (μm^2), a thickness of the capacitance detecting dielectric layer of t_D (μm), and a dielectric constant of the

capacitance detecting dielectric layer of ε_D, an element capacitance C_D of the signal detection element is defined as

$C_D=\varepsilon_0 \cdot \varepsilon_D \cdot S_D/t_D$

where ε_0 is the permittivity in vacuum; and

the element capacitance C_D being sufficiently larger than C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T; and

when the object is apart from the capacitance detecting dielectric layer with an object distance of t_A without contacting, the capacitance C_A of the object is defined as

$C_A=\varepsilon_0 \cdot \varepsilon_A \cdot S_D/t_A$

using the permittivity in vacuum of ε_0, a dielectric constant of air of ε_A, and an area of the capacitance detecting electrode S_D; and

C_R+C_T, a summation of the capacitance C_R the reference capacitor and the transistor capacitance C_T, being sufficiently larger than capacitance C_A of the object.

10. (Original) An electrostatic capacitance detection device for reading surface contours of an object by detecting an electrostatic capacitance, which changes according to the distance with the object, comprising:

M individual power supply lines and N individual output lines, arranged in a matrix of M rows × N columns, and electrostatic capacitance detection elements provided on crossing points of the individual power supply lines and the individual output lines;

each of the electrostatic capacitance detection elements being formed of a signal detection element and a signal amplification element;

the signal detection element being formed of a capacitance detecting electrode, a capacitance detecting dielectric layer and a reference capacitor;

the reference capacitor being formed of a reference capacitor first electrode, a reference capacitor dielectric layer and a reference capacitor second electrode;

the signal amplification element being formed of a MIS type thin film semiconductor device for signal amplification, including a gate electrode, a gate insulating layer and a semiconductor layer; and

a part of a drain region and a part of a gate region of the MIS type thin film semiconductor device for signal amplification forming an overlapped portion via the gate insulating layer, and an overlapped portion forms the reference capacitor.

11. (Original) The electrostatic capacitance detection device according to claim 10, using a gate electrode length, which is an overlapped portion of the gate electrode of the MIS type thin film semiconductor device for signal amplification and the semiconductor layer drain region, L_1 (μm), a gate electrode length, which is an overlapped portion of the gate electrode of the MIS type thin film semiconductor device for signal amplification and the semiconductor layer channel forming region, L_2 (μm), a width of the gate electrode of W (μm), a thickness of the gate insulating layer of t_{ox} (μm), a dielectric constant of the gate insulating layer of ε_{ox}, a capacitance C_R of the reference capacitor and a transistor capacitance C_T of the MIS type thin film semiconductor device for signal amplification are defined as

$C_R=\varepsilon_0\cdot\varepsilon_{ox}\cdot L_1\cdot W/t_{ox}$,

$C_T=\varepsilon_0\cdot\varepsilon_{ox}\cdot L_2\cdot W/t_{ox}$

where ε_0 is the permittivity in vacuum, respectively; and

using an area of the capacitance detecting electrode of S_D (μm^2), a thickness of the capacitance detecting dielectric layer of t_D (μm), and a dielectric constant of the capacitance detecting dielectric layer of ε_D, an element capacitance C_D of the signal detection element is defined as

$C_D=\varepsilon_0\cdot\varepsilon_D\cdot S_D/t_D$

where ε_0 is the permittivity in vacuum; and

the element capacitance C_D being sufficiently larger than C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T.

12. (Original) The electrostatic capacitance detection device according to claim 10, the object being apart from the capacitance detecting dielectric layer with an object distance of t_A without contacting, a capacitance C_A of the object is defined as

$C_A=\varepsilon_0\cdot\varepsilon_A\cdot S_D/t_A$

using the permittivity in vacuum of ε_0, a dielectric constant of air of ε_A, and an area of capacitance detecting electrode of S_D; and

C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T, is sufficiently larger than the capacitance C_A of the object.

13. (Original) The electrostatic capacitance detection device according to claim 10, the capacitance detecting dielectric layer being located on an uppermost surface of the electrostatic capacitance detection device, using a gate electrode length, which is an overlapped portion of the gate electrode of the MIS type thin film semiconductor device for

signal amplification and the semiconductor layer drain region, L_1 (μm), a gate electrode length, which is an overlapped portion of the gate electrode of the MIS type thin film semiconductor device for signal amplification and the semiconductor layer channel forming region, L_2 (μm), a width of the gate electrode of W (μm), a thickness of the gate insulating layer of t_{ox} (μm), a dielectric constant of the gate insulating layer of ε_{ox}, a capacitance C_R of the reference capacitor and a transistor capacitance C_T of the MIS type thin film semiconductor device for signal amplification are defined as

$C_R=\varepsilon_0 \cdot \varepsilon_{ox} \cdot L_1 \cdot W/t_{ox}$,

$C_T=\varepsilon_0 \cdot \varepsilon_{ox} \cdot L_2 \cdot W/t_{ox}$

where ε_0 is the permittivity in vacuum, respectively; and

using an area of the capacitance detecting electrode of S_D (μm^2), a thickness of the capacitance detecting dielectric layer of t_D (μm), and a dielectric constant of the capacitance detecting dielectric layer of ε_D, an element capacitance C_D of the signal detection element is defined as

$C_D=\varepsilon_0 \cdot \varepsilon_D \cdot S/t_D$

where ε_0 is the permittivity in vacuum; and

the element capacitance C_D being sufficiently larger than C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T; and

when the object is apart from the capacitance detecting dielectric layer with an object distance of t_A without contacting, a capacitance C_A of the object is defined as

$C_A=\varepsilon_0 \cdot \varepsilon_A \cdot S_D/t_A$

using the permittivity in vacuum of ε_0, a dielectric constant of air of ε_A, and an area of the capacitance detecting electrode of S_D; and

C_R+C_T, a summation of the capacitance C_R of the reference capacitor and the transistor capacitance C_T, being sufficiently larger than the capacitance C_A of the object.